MULTIMEDIA AND WEB TECHNOLOGY

Time allowed : 3 hours   *Maximum Marks : 70*

General Instructions :

(i)   Please check that this question paper contains 1 printed' pages.

(ii) Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.

(iii) Please check that this question paper contains 7 questions.

(iv) Please write down the serial number of the question before attempting it.
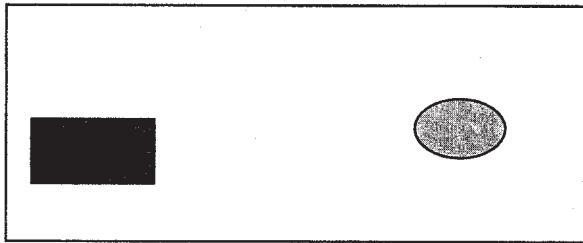
QUESTION PAPER CODE 89/1

1. (a) Define alternate key.   1

   (b) Write the difference between Text and memo data types.   1

   (c) Study the following data and answer the questions that follow :

Table : ACCOUNT

Acc_No	Cust_No	Transaction	Balance
A101	Ram Prasad	Withdrawal	10,000
A102	Kamla	Deposit	1,50,000
A103	Ramakant	Deposit	12,000
A104	Sunita	Withdrawal	36,000

   (i) Suggest the datatypes that should be used for each of the fields in the above table.   2

   (ii) Suggest a field from the above table, which can be set as primary key.   1

   (d) Write the difference between GIF and JPEG image.   2

   (e) Write the full form of MPEG.   1

   (f) What is the use of Publish Preview ? Write the steps to do so.   2

2. *Questions given below are based on Macromedia Flash :*

   (a) What is the meaning of Stage in Flash ?   2

   (b) What are the advantages of Flash movie over animated GIF movie ?   2

   (c) What is a symbol ?   1

   (d) What is a blank key frame ?   1

   (e) Observe the figure given below and do as directed :   4

- The text on the left side shows the position and size for framel. The colour of the image is blue.

- The text on the right side shows the position and size for frame2. The colour of the image is yellow.

Write the procedure and property settings for animating the above scenario.

3. *Questions given below are based on HTML :*

   (a) Write the name of tag and attribute used to have 3 pixels thick horizontal line centralized across 50% of the window.   1

   (b) Write the difference between cellpadding and cellspacing attributes.   1

   (c) Write the HTML code to generate a Web page in the format given below:

      Consider the following while writing the HTML code :   8

       1. Background colour of page is "Aqua"

       2. Link colour should be "red", active link colour should be "blue" and visited link colour should be "green"

       3. Heading of the page is "violet"

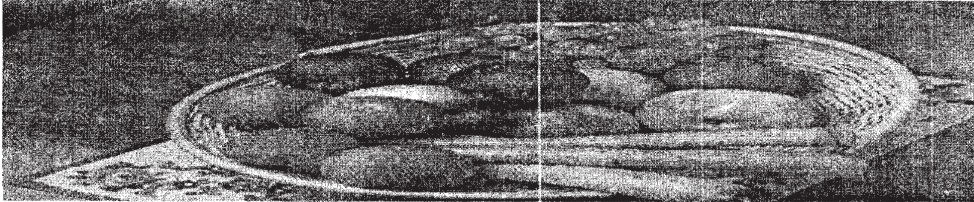   4. Picture used in the file is "food.jpg"

Table border is 2 pixels and table border colour is blue. Use nested listing wherever required.

Pages linked to :

- Carbohydrates as carb.htm

- Fats as fat. htm

- Proteins as prot.htm
- Vitamins as vit.htm
- Minerals as min.htm

FOOD AND NUTRITION

A balanced diet should contain all the nutrients of food. The essential components of food are :

- CARBOHYDRATES
- FATS
- PROTEINS
- VITAMINS
- MINERALS

SR. NO.	NUTRIENT
1	CARBOHYDRATES
2	FATS
3	PROTEINS
4	VITAMINS
5	MINERALS

A. MERITS OF :

o <u>CARBOHYDRATES</u>

o <u>FATS</u>

o <u>PROTEINS</u>

o <u>VITAMINS</u>

o <u>MINERALS</u>

B. SOURCES OF :

- CARBOHYDRATES
- FATS
- PROTEINS
- VITAMINS
- MINERALS

4. *Questions given below are based on ASP :*

(a) What is the meaning of Server Side Scripting ? 1

(b) Give the usage and syntax of the following in-built functions : 2

    (i) Cdate( )

    (ii) Cbool( )

(c) Write the output of the following code : 2

```
A  =  "multimedia"
B  =  "web"
C  =  20
D  =  "40"
Response.write  A  &  B
Response.write  C  +  D
```

(d) Write the output of the following statements : 3

    (i) Response.Write(LTRIM(LEFT("###Class XII",6)))

    (ii) Response.Write(INSTR("This is exam", "his"))

    (iii) Response.Write(LEN(MID("Multimedia",4,3)))

(e) Rewrite the following code after removing errors with each correction underlined : 2

```
<script  language  =  "asp">
<option  explicit>
a  =  0
b  =  1
for  I  =  1  to  5  go  to  1
c  =  a  *  b
response.write  c
a  =  b
b  =  c
loop
</script>
```

5. *Questions given below are based on ASP :*

(a) Write the difference between Response and Request object. 2

(b) Buffer method is associated with which object ? What is its use ? 2

(c) Write the output of the following code : 3

```
<%
    For i = 1 to 3 step 1
        sum(i)
    next
    Sub  sum(num)
    a = 0
    b = 0
    a = a + num
    b = num + b
    response.Write a & " " & b & "<br>"
    end Sub
%>
```

(d) ABC Ltd. is a publishing company which maintains a list of files stored in text file (link.txt) on the server. The company wants to treat all the files stored as pages in a book and wants to manage the navigation forward and backward through the file list. Write the ASP coding which will display the no. of files on home page like following : 3

> **ABC LTD.**
>
> **Welcome to the ABC Publishers**
> **We have total 2010 files in our list**

6. *Questions given below are based on VB Script :*

(a) Write HTML document to create the following form : 3

> Calculate your Division
>
> Enter your percentage [   ]
>
> GRADE [   ]

Use VB Script to find out the division secured by a student on the basis of the % of marks obtained in the examination. The student is failed if the marks are below 33%, he secures a III division if the marks are 33% onwards but below 50%, a II division if he secures 50% onwards but below 60%, a I division if he secures 60% onwards but below 75% and a Distinction if the score is 75% and onwards.

(b) Write the output of the following code :   2

```
dim  result
For  i  =  1  to  5
result  =  result  +  second(4)
Next
document.Write  result

Function  second(num)
second  =  num*5
num  =  num  +  1
End  Function
```

(c) Write the code which generates the following output :   2

Hello

Hell

Hel

He

H

(d) Differentiate between fixed length array and dynamic array with example.   2

(e) Rewrite the following code after removing errors with each correction
   underlined :   1

```
x=5
Do  while  x<=10
if  x  mod  2=0  then
document.  Write  x
loop
x=x+l
Endif
```

7.   *Questions given below are based on JavaScript :*

(a) Write the JavaScript to accept a number and display its multiplication table
   till the limit entered by user.   3

Ex : user enters no. as 2

User enters limit as 5

Output : 2

         4

         6

         8

         10

(b) Write the output for the following code :   2

```
var  a=1
var b=2
var c="2"
var result, num
result=c+(a+b)
document.write (result)
document.write (" <br>")
num=c+b
document.write (num)
```

(c) What is meant by methods and properties of an object ?   2

(d) Write equivalent **for loop** for the following statements without affecting the
    output :   2

```
var a  =  9
document.write (a)
document.write ("  <br>")
a  =  a-3
document.write (a+1)
document.write (" <br> " )
document.write (a-1)
document.write (" <br> " )
a  =  a-3
document.write (a)
```

(e) Rewrite the following code after removing errors with each correction
    underlined :   1

```
for (var num=5, num>=1, num--)
    document.Write (num)
```
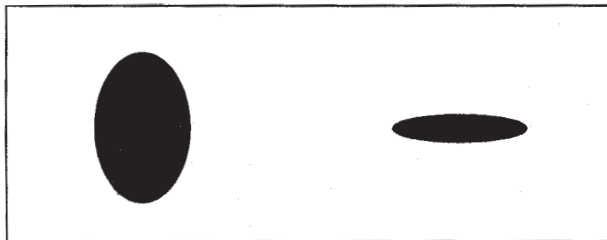
QUESTION PAPER CODE 89

1. (a) Define Foreign Key.   1

   (b) Write the difference between Number and Auto Number data types.   1

(c) Study the following data and answer the questions that follow :

Table : STOCK

Item_No	Quantity	Order_no	Date
A101	50	2356	12/10/2003
A102	40	1078	1/1/2004
A103	20	534	15/02/2004
A104	10	1530	15/07/2004

    (i) Suggest the datatypes that should be used for each of the fields in the above table.   2

    (ii) Suggest a field from the above table, which can be set as primary key.   1

(d) Write the difference between .FLA and .SWF file formats.   2

(e) Write the full form of JPEG.   1

(f) Name the file extensions, when a flash movie is published using Macintosh Projector and a Windows Projector.   2

2. *Questions given below are based on Macromedia Flash :*

(a) What is the meaning of Timeline ?   2

(b) What is the difference between a guided layer and a normal layer ?   2

(c) Name any two types of tweening.   1

(d) How do we change the frame rate ?   1

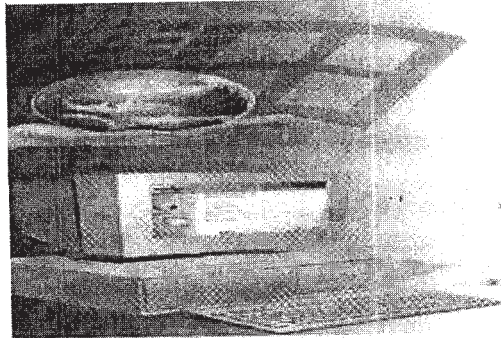(e) Observe the figure given below and do as directed :   4

- The text on the left side shows the position and size for frame1. The colour of the image is red.

- The text on the right side shows the position and size for frame15. The colour of the image is black.

Write the procedure and property settings for animating the above scenario.

3. *Questions given below are based on HTML :*

(a) Write the difference between logical and physical tags.   1

(b) Write the name of tag and attribute used to give font size of 4 pixels for entire document.   1

(c) Write the HTML code to generate a Web page in the format given below:
Consider the following while writing the HTML code :   8

     1. Background colour of page is "Cyan"

     2. Link colour should be "red", active link colour should be "blue" and visited, link colour should be "green"

     3. Heading of the page is "magenta"

     4. Picture used in the file is "start.jpg"

     5. Table border is 2 pixels and table border colour is blue

     6. Use nested listing wherever required

     7. Pages linked to :

         • Netscape Navigator as net.htm

         • Microsoft's Internet Explorer as exp.htm

         • NCSA Mosaic as mos.htm

         • Netcom's Web Cruiser as cru.htm

         • Intercon's Netshark as shark.htm

WEB BROWSERS

To travel along the interesting journey of the web one needs the web browser. Few examples of web browsers are :

• Netscape Navigator

• Microsoft's Internet Explorer

• NCSA Mosaic

• Netcom's Web Cruiser

• Intercon's Netshark

SR NO.	WEB BROWSER
1	Netscape Navigator
2	Microsoft's Internet Explorer
3	NCSA Mosaic
4	Netcom's Web Cruiser
5	Intercon's Netshark

A. MERITS OF :
- o   Netscape Navigator
- o   Microsoft's Internet Explorer
- o   NCSA Mosaic
- o   Netcom's Web Cruiser
- o   Intercon's Netshark

B. DEMERITS OF :
- ▪   Netscape Navigator
- ▪   Microsoft's Internet Explorer
- ▪   NCSA Mosaic
- ▪   Netcom's Web Cruiser
- ▪   Intercon's Netshark

4.   *Questions given below are based on ASP :*

(a)   Write the names of two equivalent tools of ASP.   1

(b)   Give the usage and syntax of the following in-built functions :   2
   (i)   CStr( )
   (ii)   CLng( )

(c)   Evaluate the following expressions and give the answer as T/F : 2

   (i)   a = 5, b = 2, c = 3
        (a > b) AND (Not (c = = 2) OR (b > c))

   (ii)   x=l, y = 2, z = 3
        (x > y) OR ((x > z) AND (y < z))

(d)   Write the output of the following statements :   3

```
Response.Write(DAY("20/4/2005"))
Response.Write(UCASE(MID("multimedia",2,4)))
Response.Write(LEN(LEFT("###Exam",4)))
(#  represents  spaces)
```

(e) Rewrite the following code after removing errors with each correction
   underlined : 2

```
<%
num = 12
b = 0
i = 0
do num > 0 step 1
b = num mod 10
num = num - 2
next
response.write  "b"
%>
```

5. *Questions given below are based on ASP :*

(a) Write the difference between Session and Application object. 2

(b) What is request object ? Name any two collections of this object. 2

(c) Write the output of the following code :

```
<%
    dim I
    Application ("Item 1") = 1
    Application ("Item 2") = 2
    Application ("Item 3") = 3
    For I=1 to Application.contents.count
    Application.contents(i)=Application.contents(i)+1
    Next
    Response.write  Application  ("Item  1")
    Response.write  Application  ("Item  2")
    Response.write  Application  ("Item  3")
%>
```

(d) Write the ASP code to list the table named as **STUDENT** from **List.mdb**
   saved at c:/inetpub/wwwroot 3

6. *Questions given below are based on VB Script :*

(a) Write HTML document to create the following form :

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Use VBScript in the same document to calculate the grades according to the marks entered. The student gets 'E' grade if the marks are below 50, he secures a 'D' grade if the marks are 50 onwards but below 60, a 'C' grade if he secures 60 onwards but below 75, a 'B' grade if he secures 75 onwards but below 90 and a 'A' grade if the score is 90 and above.

(b) Write the output of the following code : 2

```
Dim  ans,  i
ans  =  0
i=  1
do  while  i<=3
ans  =  ans+analysis(i)
i  =  i  +  1
document.write  ans
loop
function  analysis(a)
analysis  =  a
end  function
```

(c) Write the code which generates the following output using loops : 2

S
Se
Sen
Seni
Senio
Senior

(d) Differentiate between Explicit declaration and Implicit declaration of variables with example. 2

(e) Rewrite the following code after removing errors with each correction underlined : 1

```
If  x  >  y,  y  >  z
Document.write  "x  is  largest"
End  if
```

7. Questions given below are based on Java Script :

(a) Write the JavaScript to read a string and display no. of vowels and consonants as given in the following example : 3

Input string : The results are available on website

Output :

    no. of vowels 14

    no. of consonants 17

(b) Write the output for the following code   2

```
var  a=1
var  b=2
var  c="2"
var  result,  num
result  =  a+c
document.write  (result)
num  =  a  +  b  +  c
document.write  (num)
```

(c) Write the names of any two methods which are common to text object, password object and text area object.   2

(d) Rewrite the following set of **If...Else** statements in terms of **switch** statement

```
x  =  prompt  ("Enter  Code")
if  (x  =  =  'A')
document.write  ("Grade  I")
else
if  (x  =  =  'C'  ||  x  =  =  'B')
document.write  ("Grade  III")
else
if  (x  =  =  'D')
document.write  ("Grade  IV")
```

(e) Rewrite the following code after removing errors with each correction underlined :   1

```
var  sum  =  0
var  i=0
do
{
sum  =  sum  +  2
}(i<=10)
document.write  (sum)
```

Marking Scheme --- Multimedia & Web Technology

> ### *General Instructions*
>
> 1. The answers written in the marking scheme are just indicative, all other alternative answers conveying similar meaning should be considered by the examiners.
>
> 2. Marks should not be deducted for case-sensitivity in HTML.
>
> 3. Marks should not be deducted for case-sensitivity in VB Script.
>
> 4. Marks should not be deducted for case-sensitivity in ASP.
>
> 5. Marks <u>should be deducted</u> for case-sensitivity in JavaScript.
>
> 6. Marks should not be deducted for grammatical mistakes of English language in any of the questions.

<div align="center">

QUESTION PAPER CODE 89/1

EXPECTED ANSWERS/VALUE POINTS

</div>

1. (a) When there are two or more candidate keys, one of them is selected as the primary key. The remaining candidate keys are called alternate keys.

    (1 mark for any correct definition)

    (b) Text: Default type used **for** alphanumeric characters upto 255 characters.

    Memo: Alphanumeric characters upto 65,535 characters. Stored separately as a file.

    (1 mark for 1 correct difference of each)

    (½ mark if only one option is correct)

    NOTE: Approximate number of characters to be considered.

    (c) (i) Suggest the datatypes that should be used for each of the fields in the above table

Acc_no	Text
Cust_No	Text
Transaction	Text
Balance	Number OR Text

    (½ mark for each data type)

    (ii) Primary Key - **Acc_no**

    (1 mark for correct field)

<div align="center">

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</div>

(d)	Format	Bit-depth	Compression Techniques	Other Comments
	Joint Photographic Experts Group (.jpg or .jpeg)	8-bit grey; 16 bit or 24-bit colour	Lossy	JPEG files are more compact than GIF files. The JPEG image file format works best for images with many colors and a large variation of colors (e.g., a scanned photo or multimedia CD display).
	Graphics Interchange Format (.gif)	Up to 8-bit	Lossless	Supports transparency, interlacing and animation

(½ mark for each full form)

(½ mark each for any other difference between GIF and JPEG)

(e) MPEG : Motion Picture Experts Group

(½ mark for correct full form)
NOTE: ½ mark to be given if any two of the terms are correct.

(f) Flash allows previewing the movie in a browser before publishing, this is called Publish Preview.

To preview the movie in the default browser, click on "File menu and select Publish Preview and then click on one of the options in the popup menu.

(1 mark any correct definition of Publish Preview)
(½ mark for Click File Menu)
(½ mark for Select Publish Preview)

2 (a) The Stage represents the work area on which a movie is built. This is the placeholder for all the objects of a movie.
(2 marks for any correct definition)

(b) A Flash movie can be stopped or restarted by the user while in GIF it is not possible.

<p align="center">**OR**</p>

It is very easy to edit a Flash movie, while editing of GIF animation is not possible.
(2 marks for any correct difference)

(c) • Symbols are reusable objects.

OR

• They are stored in the Library and can be dragged onto the Stage to be further modified.

(1 mark for any correct definition)

(d) • Blank Key frame is a key frame that is waiting to be filled with content.

OR

• In a blank key frame the stage is empty.

(1 mark for any correct definition)

(e) The following steps have to be followed the animate the given scenario:

• Select frame 1 from the timeline and select **Insert → New Symbol Graphic**

• **Create the blue coloured figure** given on the right hand side.

• **Insert an instance of this symbol** in frame 1 by dragging it from the library window.

• **Select frame 2** from the timeline and **Select Insert   Keyframe**

• **Change the shape** and color the image.

• **Select any frame between 1 and 2.**

• Select **Create motion tween or shape tween.**

OR

Any other equivalent steps with or without symbols.

(½ mark for each step)

3   (a)   **<HR SIZE=3 WIDTH=50% ALIGN="center">**

(½ mark for using HR tag)
(½ mark if any two attributes are correct)

(b) **CellSpacing :** Specifies the amout of space between the adjacent cells of a table.

CellPadding: Specifies the amount of space between the border and the contents of a cell.

(½ mark each for any correct definition)

(c) <HTML>
<BODY BGCOLOR="aqua" LINK="red" ALINK="blue," VLINK="green">
<H1 ><FONT COLOR="violet">FOOD AND NUTRITION</FONT></H1>
<CENTER><IMG SRC="food.jpg" WIDTH=100%></CENTER>

<P>A balanced diet should contain all the nutrients of food. The essential components of food are : </P>

<UL>

<LI>CARBOHYDRATES

<LI>FATS

<LI>PROTIENS

<LI>VITAMINS

<LI>MINERALS

</UL>

<TABLE BORDER=2 BORDERCOLOR="blue">

<TR>

    <TH>SR.NO.</TH>

    <TH>NUTRIENT<TH>

</TR>

<TR>

    <TD>1</TD><TD>CARBOHYDRATES</TD>

    <TD>2</TD><TD>FATS</TD>

    <TD>3</TD><TD>PROTIENS</TD>

    <TD>4</TD><TD>VITAMINS</TD>

    <TD>5</TDxTD>MINERALS</TD>

</TR>

</TABLE>

<OL TYPE="A">

<LI>MERITS OF:

<UL TYPE="circle">

    <LI><A HREF="carb.htm">CARBOHYDRATES</A>

    <LI><A HREF="fat.htm">FATS</A>

    <LI><A HREF="prot.htm">PROTIENS</A>

    <LI><A HREF="vit.htm">VITAMINS</A>

    <LI><A HREF="min.htm">MINERALS</A>

</UL>

<Ll>SOURCES OF :

<UL TYPE="square">

<LI>CARBOHYDRATES

<LI>FATS

<LI>PROTIENS

<LI>VITAMINS

<LI>MINERALS

</UL>

</OL></BODY></HTML>

(1 mark for correct use of <HTML> and <BODY> tags)
(½ mark for body background colour)
(1 mark for specifying LINK, ALINK, VLINK colours)
(1 mark for displaying heading correctly in center with voilet color)
(1 mark for correct use of <IMG>tag)
(½ mark for correct code for first list)
(1 mark for correct use of <OL> and <UL> tags in proper nested order)
(1 mark for correct use of <A> tag for creating links)
(1 mark making table border 2 pixel thick and bordercolor blue)

4. (a) Server-side scripting means that the scripts are processed by the server rather than by the client.

   (1 mark for any correct definition)

   (b)

	Syntax	Usage
(i)	Cdate(exp)	Converts an expression into a date or time value.
(ii)	Cbool(exp)	Converts an expression into a Boolean value.

   (1 mark each for usage or syntax)

   (c) *(1 mark for each output)*

   NOTE: No marks to be deducted if output is written on separate lines. ½ mark to be given if 2040 is written instead of 60.

   (d) (i) Cla

   (ii) 2

   (iii) 3

   (1 mark each)

   OR `<script language="vbscript" Runat=SERVER>`

   (e) **Corrected code with errors underlined :**

```
<script  language="vbscript">    <%
option  explicit                 option  explicit
a=0                              a=0
b=l                              b=l
```

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```
for 1= 1 to 5 step 1        for 1= 1 to 5 step 1
c=a*b                       c=a*b
document.write  c           response.write(c)
a=b                         a=b
b=c                         b=c
next                        next
</script>                   %>
```

(½ mark for each error)

5.   (a) **Response Object:** The Response object corresponds to an HTTP reponse. The methods and properties of this object control how information is sent from the Web server back to a browser.

        Request Object: The Request object is used to gain access to any information that is passed with an HTTP request from the browser to the server.

        (1 mark each for any correct definition)

   (b) Buffer method is associated with the **Response** object.

        NOTE: Buffer <u>property</u> is associated with the **Response** object. (Corrected)

        It indicates whether page output is buffered. When page output is buffered, the server does not send a response to the client until all of the server scripts on the current page have been processed, or until the Flush or End method has been called.

        (2 marks)

        NOTE: 2 marks to be given if question has been attempted and any one part is correct.

   (c) 11
        22
        33
        (1 mark for each line)

   (d) **OUT OF SYLLABUS**

        (Full 3 marks to be given if any other part of Question 5 is attempted)

6.   (a)
```
<HTML>
<HEAD>
<SCRIPT  LANGUAGE="VBScript">
DIM  Grade
```

```
    IF  document.frml.txtl.value  >=75  THEN
       Grede="Distinction"
     ELSEIF  document.frml.txtl.value  >=60  THEN
       Grade="I  Division"
     ELSEIF  document.frml.txtl.value  >=50  THEN
       Grade="II  Division"
     ELSEIF  document.frml.txtl.  value  >=33  THEN
       Grade="III  Division"
     ELSE
       Grade="Failed"
     END  IF
    Document.frml.txt2.value=Grade
    </SCRIPT>
    </HEAD>
    <BODF>
    <FORM  NAME="frml">
    <P>  Calculate  your  division</P>
    <P> Enter your percentage <INPUT TYPE="text" NAME="txtl"XBR>
      Grade  <INPTUT  TYPE=''text"  NAME="txt2">
    </P>
    </FORM>
    </BODY>
    </HTML>
```

OR

Any other equivalent code

(½ mark for correct <FORM> tag)
(½ mark for correct <INPUT> tags)
(1½ mark for correct IF statements)
(½ mark for correct display)

(b) 100

(2 mark for correct answer)

(c)
```
    <SCRIPT  LANGUAGE="VBScript">
    Str="Hello"
    L=LEN(Str)
    FOR  k=L  to  1  step  -1
```

```
Document.Write(LEFT(Str,k)&"<BR>")   OR   MID(Str,l,k)
NEXT
</SCRIPT>
```

OR

Any other equivalent code

(1 mark for correct use of loop)

(½ mark for display)

(½ mark for line break)

(d) DYNAMIC ARRAY not in the syllabus.

(**Full 2 marks to be given if student has explained something about arrays)**

OR

(**Full 2 marks to be given if any three out of Q.6a, 6b, 6c and 6e answers are correct)**

(e) Corrected code with errors underlined:

```
X=5
Do  while  x<=10
If  x  mod  2=0  then
Document.write  x
End  If
Loop
x=x+l
```

(1 mark if error identified and rectified correctly)

NOTE: ½ mark to be given if ENDIF written as one word at the correct position.

7.   (a)
```
<SCRIPT  LANGUAGE="JavaScript">
var  num,  limit
num  =  Prompt("Enter  a  number")
limit  =  Prompt("Enter  the  limit")
for(k=l;  k<=limit  ;  k++)
    document.write(  num*k  &  "<BR>")
NEXT
</SCRIPT>
```

OR

Any other equivalent code

(1 mark for correct input)
(1 mark for correct use of loop)
(1 mark for correct display)

(b) 23
22

(1 mark for each line)
OR
(½ mark to be given if 4 is written instead of 22)

(c) **Object Method:** A method is an action that can be performed on an object or with an object.

Object Property: A property is an attribute that describes the object i.e. properties that define object characteristics.

(1 mark each for any correct definition)

(d) *(Full 2 marks to be given if the student has attempted this part of question 7)*

OR

(Full 2 marks to be given if any three out of Q.7a, 7b, 7c and 7e answers are correct)

(e) Corrected code with errors underlined: Ans

for (var num=5; num>=1; num--)
        document.write(num)

(½ mark for each error)

<center>QUESTION PAPER CODE 89</center>

<center>**EXPECTED ANSWERS/VALUE POINTS**</center>

1. (a) Foreign key is an attribute of one relation whose values are required to match those of the primary key of some other relation. The foreign key is used to relate two or more tables.

(1 mark for the correct definition)

(b) The data in AutoNumber datatype is automatically entered by Access for each record whereas the data in number datatype is to be input manually.

(1 mark for the correct differentiation point)

(c) (i)

Field Name	Data Type
ltem_No	Text
Quantity	Number
Order_No	Number
Date	Date/Time

(1/2 mark for each correct datatype given)

(ii) Primary key - ltem_No

(1 mark for naming the correct field)

(d)

.FLA file format	.SWF file format
1. Is the extension of the flash source file	1. Is the extension of the flash published file
2. It can be opened and edited at <u>any point of time</u>	2. The .SWF file can't be edited, it <u>can only be viewed.</u>

(1 mark for any correct differentiation point)

(e) JPEG stands for Joint Photographic Experts Group.

(1 mark for the correct expansion)
NOTE: ½ mark to be given if any two of the terms are correct.

(f) The extensions of the file created when **a** Flash movie is published using Macintosh projector is **.hqx** and using Windows Projector is **.exe**

(1 mark for naming each correct extension)

2. (a) In the right pane of the Layer area is what appears to be a ruler with numbers incremented at regular intervals. This is the Timeline.

OR

The timeline is the collection of layers and frames that contain the content of a movie.

OR

Timeline can be used to control how objects are animated.

(2 mark for any correct definition or usage)

(b) Normal Layer: By default, all layers added to the Timeline are normal layers, which means all the objects on the layer appear in the movie.

Motion Guide layer: A **motion guide layer,** contains an animation path that links to an object on another layer. Motion guide layers are exported in the movie, but are not visible in the movie.

(1 mark for the definition of each)

NOTE: Full marks if either Motion Guide or Normal Guide Layer is defined.

(c) Shape Tweening, Motion Tweening (or Tint Tweening).

(1/2 mark for each name)

(d) Select Modify > Movie and change the value in the Frame Rate box.

OR

Right click on the stage, select Movie Properties and change value in the Frame Rate box.

(1 mark for any equivalent correct step)

(e) The following steps have to be followed to animate the given, scenario:

- Select frame 1 from the timeline and select **Insert → New Symbol → Graphic**
- **Create the red coloured oval** given on the left hand side.
- **Insert an instance of this symbol in frame 1** by dragging it from the library window.
- **Select frame 15** from **the timeline and Select Insert → Keyframe**
- **Change the** size of the ovel
- **Change the colour** of the oval
- **Select any frame between 1 and 15**
- Right click the mouse button and **Select Create motion tween or shape tween.**

OR

Any other equivalent method with or without symbols.

(½ marks for each step)

3. (a) Logical tags are used for implicit formatting, since they hint at the type of formatting required whereas physical tags are used for explicit formatting, since they specifically tell the Web browser how the text is to appear physically.

(1 mark for any correct differentiation point)

NOTE: ½ mark to be given if the student has only given examples of each.

(b) Tag - <FONT>

Attribute - SIZE

<FONT SIZE=4>

(½ mark for correct tag and ½ mark for correct attribute)

(c)
```
<HTML>
<HEAD>
<TITLE>Browsers</TITLE>
</HEAD>
<BODY  BGCOLOR="CYAN"  LINK=red  ALINK=Blue  VLINK=Green>
<FONT  FACE="COMTC  SANS  MS"><FONT  COLOR=MAJENTA>
<H2  ALIGN=CENTER>  WEB  BROWSERS  </H2></F0NT><BR>
<P  ALIGN=CENTER><IMG  SRC="Start.GIF"  HEIGHT=120
WIDTH=180>
<P>To  travel  along  the  interesting  journey  ofthe  web  one  needs
the  web  browser.  <BR>
Few  examples  of  web  browsers  are:
<UL>
<LI>Netscape  Navigator
<LI>Microsoft's  Internet.  Explorer
<LI>NCSA  Mosaic
<LI>Netcom's  Web  Cruiser
<LI>Intercon's  Netshark
</UL>
<TABLE  ALIGN=CENTER  BORDER=2  BORDERCOLOR=Blue>
<TR><TH>SR  NO></TH>
<TH>WEB  BROWSER</TH>  </TR>
<TR><TD>1>/TD>
<TD>Netscape  Navigator</TD></TR>
<TR><TD>2</TD>
<TD>Microsoft's  nternet  Explorer</TD></TR>
<TR><TD>3</TD>
<TD>NCSA  Mosaic</TD></TR>
<TR><TD>4</TD>
<TD>Netcom's  Web  Cruiser</TD></TR>
<TR><TD>5</TD>
<TD>Intercon's  Netshark</TD></TR>
</TR>
</TABLE>
<OL  type="A">
<LI>MERITS  OF:
<UL  TYPE="circle">
```

```
<LI><A  HREF="net.htm">Netscape  Navigator</A>
<LI><A  HREF="exp.htm">Microsoft's  nternet  Explorer</A>
<LI><A  HREF="mos.htm">NCSA  Mosaic</A>
<LI><A  HREF="cru.htm">Netcom's  Web  Cruiser</A>
<LI><A  HREF="shark.htm">Intercon's  Netshark</A>
</UL><BR>  <LI>DEMERITS  OF:
<UL  TYPE="square">
<LI>Netscape  Navigator
<L  I  >Microsoft's  nternet  Explorer
<LI>NCSA  Mosaic
<LI>Netcom's  Web  Cruiser
<LI>Intercon's  Netshark
</UL></OL>
</BODY>
</HTML>
```

(1 mark for correct use of <HTML> and <BODY> tags)
(½ mark for body background colour)
(1 mark for specifying LINK, AUNK, VLINK colours)
(1 mark for displaying heading correctly in center with magenta color)
(1 mark for correct use of <IMG> tag)
(½ mark for correct code for first list)
(1 mark for correct use of <OL> and <UL> tags in proper nested order)
(1 mark for correct use of <A>tag for creating links)
(1 mark making table border 2 pixel thick and bordercolor blue)

4.   (a) •   JSP (Java Server Pages)
         •   PHP (Personal Home Page)
         •   CGI (Common Gateway Interface)
         •   Cold Fusion

(½ mark for each for any two correct tool)

(b)

	Syntax	Usage
(i)	CStr(exp)	Converts an exp into a string. The expression can be any kind of data.
(ii)	CLng(exp)	Converts an exp into **a** long integer (a large natural) number.

(1 mark for correct syntax or correct usage of each)

(c) (i) True

(ii) False

(1 mark for each correct answer)

(d) 20

ULTI

4

(1 mark for each correct output)

(e)
```
<%
num  =  12
b  =  0
i  =  0
do  while  num  >  0
b  =  num  mod  10
num  =  num  -2
loop
response.write  "b"
%>
```

(1 mark for each correction)

Note : ½ mark to be given if error is only identified.

5. (a) The **Session object** is used to store information needed for a particular user session. Variables stored in the session object are not discarded when the user jumps between pages in the application.

The **Application object** on the other hand is used to share information among all users of a given application.

(1 mark for each correct definiton)

(b) The Request object is used to gain access to any information that is passed with an HTTP request from the browser to the server.Collections of the Request Object are :

1. Form Collection

2. QueryString Collection

3. ServerVariables Collection

4. Cookies Collection

5. ClientCertificate Collection

(1 mark for the usage of Request Object and ½ mark each for any two collections)

(c) 234

(1 mark for each correct number)

NOTE: No marks to be deducted if the output is given on separate lines.

(d)
```
<HTML>
  <%
Dim objConn, strConn, objRS
Set objConn = Server.CreateObject("ADODB.Connection")
strConn = "Provider=Microsoft.Jet.OLEDB.4.0;   Data
Source="C:\Inetpub\studenr.mdb"
objConn.Open  strConn
Set objRS = Server.CreateObject("ADODB.RecordSet")
objRS.Open  "Student",objConn
%>
</HEAD>
<BODY>
<H2>Student  Table</H2>
<% While NOT objRS.EOF %>
<%=objRS("Admno")  %>
<%=objRS("Name")%>
<%=objRS("DateofBirth")  %>
<%=objRS("Address")%>  < %
objRS.MoveNext
Wend
objRS.Close
objConn.Close
Set  objConn=Nothing
set  objRS=Nothing
%>
</BODY></HTML>
```

OR

Any other equivalent code

(½ mark for object creation)
(½ mark for Opening the file)
(½ mark for loop)
(½ mark for display)
(½ mark for moving to next record)
(½ mark for closing)

6. (a)
```
<HTML>
<HEAD>
<SCRIPT  LANGUAGE="VBScript">
DIM  Grade
  IF  document.frml.txtl.value  >=90  THEN
    Grade="A"
  ELSEIF  document.frml.txtl.value  >=75  THEN
    Grade="B"
  ELSEIF  document.frml.txtl.value.  >=60  THEN
    Grade="C"
  ELSEIF  document.frml.txtl.value  >=50  THEN
    Grade="D"
  ELSE
    Grade="E"
  END  IF
Document.frml.txt2.value=Grade
</SCRIPT>
</HEAD>
<BODY>
<FORM  NAME="frml">
<P>  Calculate  your  division</P>
<P> Enter your marks <INPUT TYPE="text" NAME="txtl"><BR>
  Your  Grade  is  <INPUT  TYPE="text"  NAME="txt2">
</P>
</FORM>
</BODY>
</HTML>
```

OR

Any other equivalent code

(½ mark for correct <FORM> tag)
(½ mark for correct <INPUT> tags)
(1½ mark for correct IF statements)
(½ mark for correct display)

(b) 136

(1 mark for first number and ½ mark each for other two numbers)
NOTE: No marks to be deducted if the output is given on separate lines.

(c) The code is as follows:

```
<Script  language="VBScript">
string1="Senior"
for  j=1  to  len  (string1)
    document.write(left(string1,j)+"<BR>")
next
</Script>
```

OR

Any other equivalent code

(1 mark for the loop)

(½ mark for display)

(½ mark for line break)

(d) **Implicit declaration** means start using variables wherever needed in the script and the variable is automatically created. For example:

Firstname = "Ram"

In the **explicit declaration,** the variables are declared before using them. Variables are declared by using the dimension statement, DIM followed by the name of the variable. For example:

Dim Firstname

Firstname="Ram"

(1 mark for the correct differentiation point and 1 mark for example)

NOTE: Full 2 marks to be given if an example is given with correct explnation.

(e) If x > y <u>AND</u> y > z

Document.write " x is largest"

End If

(1 mark if error identified and rectified correctly)

NOTE: ½ mark to be given if error is only identified

7. (a)
```
<Script  language="JavaScript">
string2=prompt("Enter  the  string")
string1=  new  String(string2)
countv=0
countc=0
for(i=  0;i<=string1.length;  i++)
{
```

```
if(stringl.charAt(i)  =='a'  ||  stringl.charAt (i)=='e'  ||
stringl.charAt(i)=='i' ||stringl.charAt  (i)=='o'||
stringl.charAt(i)=='u? ||stringl.charAt  (i)=='A'||
stringl.charAt(i)=='E' ||stringl.charAt  (i)=='I'||
stringl.charAt(i)=='O' ||stringl.charAt  (i)=='U')
    countv++
else
    countc++
}
document.write("no.  of  vowels" + countv)
document.write("no.  of  consonants" + countc)
</Script>
```

OR

Any other equivalent code

(½ mark for correct input)
(1 mark for correct loop)
(1 mark for correct conditional statement)
(½ mark for correct display)

(b) 1232

(½ mark for each correct number in the output)

NOTE: No marks to be deducted if output is given on separate lines,

(c) **Properties:**   **Events:**

defaultvalue   OnChange

form   OnFocus

name   OnBlur

type   OnSelect

value

(1 mark each for any two properties or events)

(d)
```
x=prompt("Enter  Code")
switch  (x)
{
case  'A':
document;write("Grade  I")
break
```

```
case 'B':
case 'C:
document.write(Grade  III")
break
case 'D':
document.write("Grade  IV")
break
}
```

(½ mark for correct switch statement)
(1 mark for proper case statements)
(½ mark for proper break statements)

(e)
```
var  sum  =  0
var  i  =  0
do
{
sum  =  sum  +  2
}  while  (i<=  10)
document.write(sum)
```

(1 mark if error identified and rectified correctly)

NOTE: ½ mark to be given if error is only identified